

CLAIMS:

1. A method for providing a double-sided cooled electronic package (100), comprising:
positioning a plurality of heatslug members (140) over a corresponding plurality
of electronic packages (100') formed on a leadframe strip (142), wherein each of the
5 heatslug members includes a heatslug (130) and a plurality of legs (144) for supporting
the heatslug over a respective one of the electronic packages;
introducing a molding compound (132) between each heatslug member and its
respective electronic package;
curing the molding compound; and
10 cutting (150) the heatslug members and separating the electronic packages (100)
from the leadframe strip, such that each electronic package includes a heatslug for
cooling a first side of the electronic package.
2. The method of claim 1, wherein the plurality of heatslug members (140) are
15 thermally conductive.
3. The method of claim 1, wherein the plurality of heatslug members (140) are formed
from a material selected from the group consisting of copper and aluminum.
- 20 4. The method of claim 1, wherein the legs (144) of each heatslug member (140)
support the heatslug (130) above its corresponding electronic package (100') such that
the heatslug does not contact the electronic package.
5. The method of claim 1, wherein the molding compound (132) is electrically
25 insulating and thermally conducting.
6. The method of claim 1, wherein each of the electronic packages (100') formed on the
leadframe strip (142) includes a leadframe (112) which acts as a heatsink to cool a
second side of the electronic package.

7. The method of claim 1, wherein the plurality of electronic packages (100') on the leadframe strip (142) are separated from each other by a removable section (146), and wherein the cutting step (150) cuts away the removable sections.
- 5 8. The method of claim 7, wherein the positioning step positions the legs (144) of the plurality of heatslug members (140) on the removable sections (146).
9. A method for providing a double-sided cooled electronic package (100), comprising:
positioning a heatslug member (140) over an electronic package (100'), wherein
10 the heatslug member includes a heatslug (130) and a plurality of legs (144) for supporting the heatslug over the electronic package;
introducing a molding compound (132) between the heatslug member and the electronic package;
curing the molding compound; and
15 cutting the legs of the heatslug member away such that only the heatslug remains, wherein the heatslug cools a first side of the electronic package.
10. The method of claim 9, wherein the heatslug member (140) is thermally conductive.
- 20 11. The method of claim 9, wherein the heatslug member (140) is formed from a material selected from the group consisting of copper and aluminum.
12. The method of claim 9, wherein the legs (144) of the heatslug member (140) support the heatslug (130) above the electronic package (100') such that the heatslug does not
25 contact the electronic package.
13. The method of claim 9, wherein the molding compound (132) is electrically insulating and thermally conducting.
- 30 14. The method of claim 9 wherein the electronic package (100) comprises a heatsink (112) for cooling a second side of the electronic package.

15. The method of claim 9 wherein the electronic package (100') includes removable sections (146), and wherein the cutting step (150) cuts away the legs (144) of the heatslug member (140) and the removable sections.

5 16. The method of claim 15, wherein the positioning step positions the legs (144) of the heatslug member (140) on the removable sections (146).

17. A double-sided cooled electronic package (100), comprising:

10 at least one integrated circuit chip (116) mounted on a leadframe (112) that acts as a heatsink for cooling a first side of the electronic package;
a thermally conductive heatslug (130); and
an electrically insulating and thermally conductive molding compound (132) for supporting the heatslug above the at least one integrated circuit chip, wherein the heatslug cools a second side of the electronic package.

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18. The electronic package of claim 17, wherein the heatslug (130) does not contact the at least one integrated circuit chip (116).